FOSTER

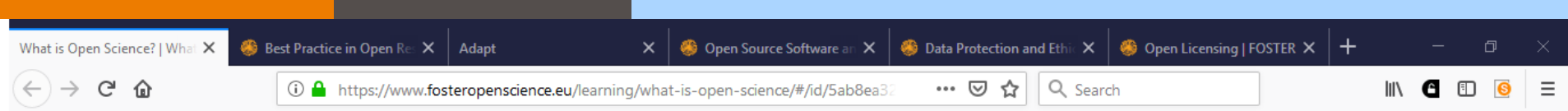# **Best Practice in Open Science**

Iryna Kuchma, EIFL

EaPConnect's OpenAIRE Training| Kyiv | June 5th, 2019

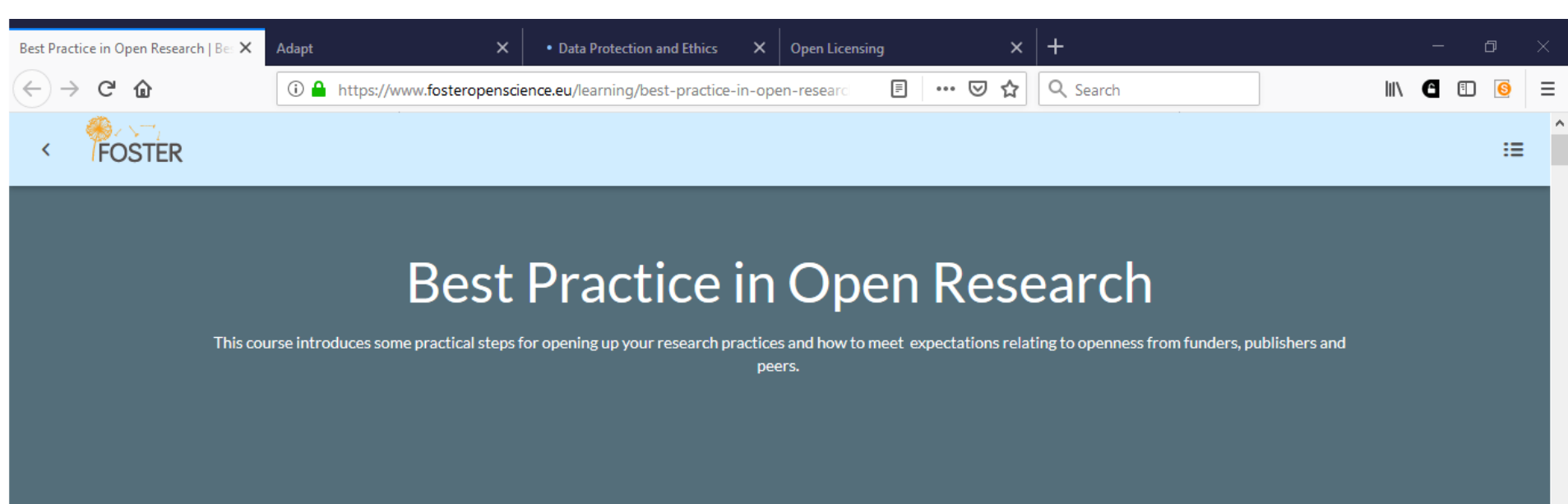What is Open Science? | What ✕ | 🌐 Best Practice in Open Re ✕ | Adapt ✕ | 🌐 Open Source Software an ✕ | 🌐 Data Protection and Ethi ✕ | 🌐 Open Licensing | FOSTER ✕ | +

https://www.fosteropenscience.eu/learning/what-is-open-science/#/id/5ab8ea3a

🔍 Search

FOSTER

What is Open Science?

This introductory course will help you to understand what open science is and why it is something you should care about.

https://www.fosteropenscience.eu/learning/what-is-open-science

Overview

This introductory course will help you to understand what open science is and why it is something you should care about. You'll get to grips with the expectations of research funders and will learn how practising aspects of open science can benefit your career progression. Upon completing this course, you will:

- understand what Open Science means and why you should care about it
- be aware of some of the different ways to go about making your own research more open over the research lifecycle
- understand why funding bodies are in support of Open Science and what their basic requirements are
- be aware of the potential benefits of practicing open science

https://www.fosteropenscience.eu/learning/best-practice-in-open-research

Best Practice in Open Research

This course introduces some practical steps for opening up your research practices and how to meet expectations relating to openness from funders, publishers and peers.

https://www.fosteropenscience.eu/learning/
best-practice-in-open-research

Introduction

This course introduces some practical steps toward making your research more open. We begin by exploring the practical implications of open research, and the benefits it can deliver for research integrity and public trust, as well as benefits you will accrue in your own work. After a short elaboration of some useful rules of thumb, we move quickly onto some more practical steps towards meeting contemporary best practice in open research, and introduce some useful discipline specific resources. Upon completing this course, you will:

- be able to contextualise you research environment
- be aware of the questions you should bear in mind as you progress through the key stages of your research
- know about some discipline-specific resources to help you embed Open Science into work research practices

FOSTER

Manage by stages

Starting your research project

Things to think about when you start your next research project

Click the plus sign to expand the text box

+ What will you produce during your research?

+ What tools and infrastructure will you use to carry out your work?

+ What publishing routes will you use?

+ How will you communicate your choices?

+ How will you make your data FAIR?

https://www.fosteropenscience.eu/learning/best-practice-in-ope

FOSTER

During your research project

Things to think about during your research project

Click the plus sign to expand the text box

+   Handling, processing, transferring of data

+   Dealing with sensitive data

https://www.fosteropenscience.eu/learning/best-practice-in-ope   120%

FOSTER

Coming to the end of your research project? Here are a few things to consider.

Click the plus sign to expand the text box

+ Have you used common standards?

+ Deposit your outputs somewhere safe

+ Have you assigned licenses and persistent identifiers?

+ Have you met your funder's expectations (e.g., is your data FAIR)?

FOSTER

As I get close to the end of my project, I should start thinking about making my data FAIR (Findable, Accessible, Interoperable, Reusable).
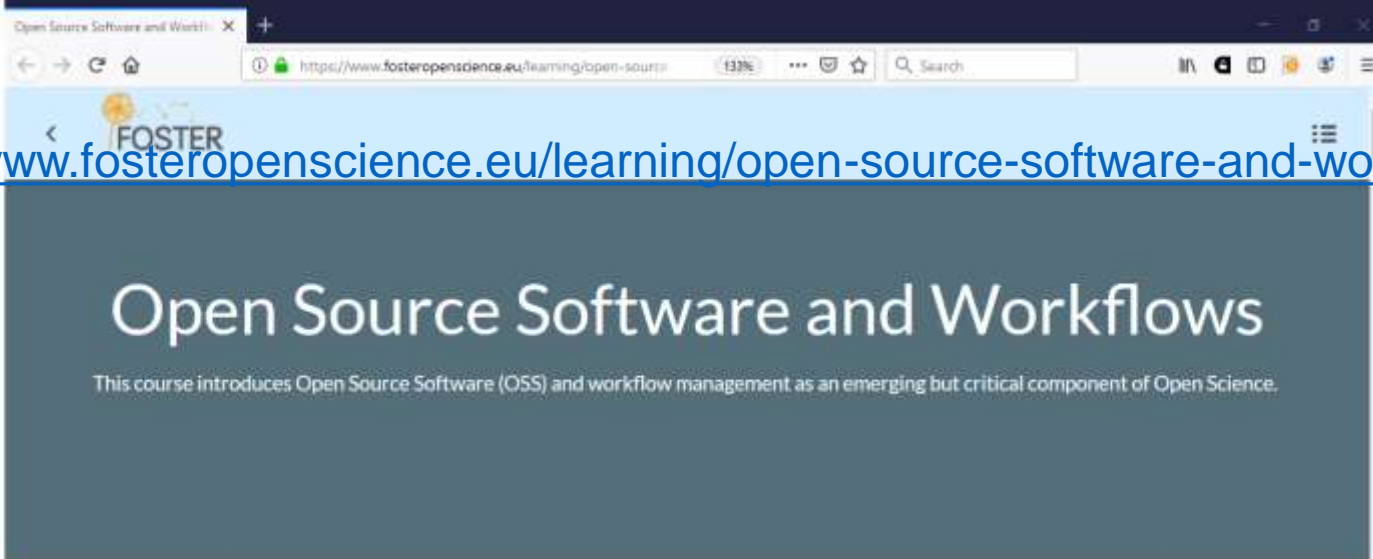
Select one of the options below.

○ True

○ False

| Submit | Show feedback |

Open Source Software and Workflows

This course introduces Open Source Software (OSS) and workflow management as an emerging but critical component of Open Science.

Introduction

This course introduces Open Source Software (OSS) management and workflow as an emerging but critical component of Open Science. The course explains the role of software sharing and sustainability in reproducibility, trust and longevity, and provides different perspectives around the sharing and reuse of computational code and methods, namely the software producer, the software reuser, and the non-coder with an interest either in reproducing research findings or in following experimental processes. You'll learn about useful resources and tools for sharing and exposing your code and workflows. Upon completing this course, you will:

- understand the roles that open source software and open workflows play in supporting Open Science
- know how Open Science can support reproducibility
- be aware of issues to consider at different stages of the research lifecycle
- know about useful tools and resources to help you get started with using OSS and open workflows

Thank you!

Iryna Kuchma

iryna.kuchma@eifl.net